



Modeling National and Regional Resources in Fire Program Analysis (FPA)

Purpose

This paper describes how Fire Planning Unit (FPU) planners enter national and regionally funded resources into Fire Program Analysis (FPA) for their FPU analyses.

Discussion - Modeling Shared Resources

Modeling National Resources

The following national shared resources are available for FPU's use in their analyses:

- Aerial resources: Type 1 & 2 Large Airtankers, national Type 1, 2, and 3 helicopters (excludes helitack),
- Scoopers, if not locally funded,
- Smokejumpers, smokejumper aircraft, and
- National Interagency Hotshot Crews.

National resources are “no-cost” resources to the FPU; the national level pays their costs. This means FPA models initial attack using these resources, but their costs do not appear in the FPU's analysis. Nationally shared resources are available to all FPUs. The National FPA Administrator enters these resources into the system. Generally, if the FPU's base allocation¹ for preparedness includes unit-level support funding for national shared resources, FPUs need to enter the support cost in the FPA Preparedness Options screen.

Regionally-Funded Shared Resources

FPA also models regionally funded shared resources in an analysis. This can include aerial resources such as helicopters. The National FPA Team enters these resources into the system.

These resources are also “no cost” resources. Regions pay their costs and so the costs may not appear in the local FPU's analysis. Whether they are “no cost” resources, or funded by the local unit, the FPU should enter the percentage of time these resources are available. If the FPU base allocation for preparedness includes unit-level support funding for regional shared resources, FPUs need to enter the cost in the FPA Preparedness Options screen.

Non-Federal Resources

FPUs should include in their analyses resources not owned by the federal government but are common responders to fires on federal lands. FPUs enter the dispatch locations for these resources and add these resources in the dispatch logic to reflect their typical historical response

¹ Base allocation in this document refers to the allocation given separately to the FPUs for the FPA analysis.



Modeling National and Regional Resources in Fire Program Analysis (FPA)

or availability. This improves the accuracy of the modeled initial attack capability. In most cases, non-federal resources do not respond 100% of the time and are not available 100% of the time.

[Table 1](#) lists those resources frequently shared among FPUs and includes information about how FPA models these shared resources. For each resource type, the columns indicate whether or not an FPU Planner:

- Can assign that resource to a dispatch location in the FPU,
- Must include the cost of that resource in the local FPU costs,
- Can create this type of resource as a new resource within the FPU, and/or
- Can adjust the percent availability of a resource.

When assigning the percentage available for shared resources, consider the normal or average amount of time during the regular fire season that each particular resource may be available. For example, an Interagency Hotshot Crew may have historically been available locally for suppression assignments only 10 days of a 120-day funding period. In this case, they would be available 8% of the time.

Table 1: Modeling Shared Resources in FPA

Resource Type FPUs May Share	FPU Can Assign Resource to a Dispatch Location (Y/N)	FPU Must Include Resource Cost in their FPU Budget (Y/N)	FPU Can Create as a New Local Resource (Y/N)	FPU Can Adjust Percent Available (Y/N)	Comments
Large Airtankers (Type 1 & Type 2)	N	N	N	N	FPUs specify the need for a Large Airtanker in their dispatch logic. Large Airtankers respond from nationally defined dispatch locations.
Single Engine Airtankers (SEATS)	Y	See Comment	Y	Y	FPA models these resources like other local resources. FPUs must enter contract and support costs in their analysis if the resource is funded locally.
Scoopers (Fixed wing aircraft with water scooping capability)	Y	See Comment	Y	Y	FPA models these resources like other local resources. FPUs must enter contract and



Modeling National and Regional Resources in Fire Program Analysis (FPA)

Resource Type FPUs May Share	FPU Can Assign Resource to a Dispatch Location (Y/N)	FPU Must Include Resource Cost in their FPU Budget (Y/N)	FPU Can Create as a New Local Resource (Y/N)	FPU Can Adjust Percent Available (Y/N)	Comments
					support costs in their analysis if the resource is funded locally.
Type 1 Helicopters (Existing)	N	N	N	Y	Do not show costs for <i>existing</i> Type 1 helicopters. FPUs must enter helitack or transported crew costs separately as they are not included with the helicopter resource. If the FPU chooses to add helitack or add helicopters beyond existing numbers, see the Type 1 Helicopters (Additional) row for guidance.
Type 1 Helicopters (Additional)	Y	Y	Y	Y	FPUs can add Type 1 helicopters; however, they must enter the total contract cost and any associated support costs at the FPU level.



Modeling National and Regional Resources in Fire Program Analysis (FPA)

Resource Type FPU's May Share	FPU Can Assign Resource to a Dispatch Location (Y/N)	FPU Must Include Resource Cost in their FPU Budget (Y/N)	FPU Can Create as a New Local Resource (Y/N)	FPU Can Adjust Percent Available (Y/N)	Comments
Type 2 Helicopters (Existing)	N	N	N	Y	Do not show costs for <i>existing</i> Type 2 helicopters. FPU's must enter helitack or transported crew costs separately as they are not included with the helicopter resource. If the FPU chooses to add helitack or add helicopters beyond existing numbers, see the Type 2 Helicopters (Additional) row for guidance.
Type 2 Helicopters (Additional)	Y	Y	Y	Y	FPU's can add Type 2 helicopters; however, they must enter the total contract cost and any associated support costs at the FPU level.



Modeling National and Regional Resources in Fire Program Analysis (FPA)

Resource Type FPU's May Share	FPU Can Assign Resource to a Dispatch Location (Y/N)	FPU Must Include Resource Cost in their FPU Budget (Y/N)	FPU Can Create as a New Local Resource (Y/N)	FPU Can Adjust Percent Available (Y/N)	Comments
Type 3 Helicopters Nationally or Regionally Funded (Existing)	N	N	Y	Y	Do not show costs for <i>existing</i> Type 3 helicopters that are nationally or regionally funded. FPU's must enter helitack or transported crew costs separately as they are not included with the helicopter resource. If the FPU chooses to add helitack or add helicopters beyond existing numbers, see the Type3 Helicopters (Additional) row for guidance.
Type 3 Helicopters (Additional)	Y	Y	Y	Y	FPU's can add Type 3 helicopters; however, they must enter the total contract cost and any associated support costs at the FPU level.
Type 3 Helicopters FPU Funded (Existing)	Y	Y	Y	Y	FPA models these resources like other local resources. FPU's must enter crew and support costs in their analysis.



Modeling National and Regional Resources in Fire Program Analysis (FPA)

Resource Type FPU's May Share	FPU Can Assign Resource to a Dispatch Location (Y/N)	FPU Must Include Resource Cost in their FPU Budget (Y/N)	FPU Can Create as a New Local Resource (Y/N)	FPU Can Adjust Percent Available (Y/N)	Comments
Helitack & Rappellers (Additional)	Y	Y	Y	Y	FPU's can add helitack and rappellers to existing and/or additional helicopters; however, the FPU enters any additional costs for these new resources (staffing and support.)
Smokeyjumpers - Alaska	Y	Y	Y	Y	Smokeyjumpers are a local resource in Alaska. The Alaska FPU enters all smockeyumper information.
Smokeyjumpers – Lower 48	N	N	N	Y	In the lower 48 states, smockeyjumpers and their bases, including satellite bases, are national resources and are entered by the National FPA Team.
Smokeyjumper Aircraft - Alaska	Y	Y	Y	Y	The Alaska FPU enters the smockeyjumper aircraft as local resources.
Smokeyjumper Aircraft – Lower 48	N	N	N	N	To simplify the model, FPA uses a single “average” type of aircraft to transport smockeyjumpers. The FPA National Team enters the aircraft typically located at main and satellite dispatch locations. The



Modeling National and Regional Resources in Fire Program Analysis (FPA)

Resource Type FPU's May Share	FPU Can Assign Resource to a Dispatch Location (Y/N)	FPU Must Include Resource Cost in their FPU Budget (Y/N)	FPU Can Create as a New Local Resource (Y/N)	FPU Can Adjust Percent Available (Y/N)	Comments
					user must select an aircraft if smokejumpers are borrowed, otherwise the smokejumpers will not be used.
National Interagency Hotshot Crews	N	N	N	Y	The hosting FPU does not include costs for the crew and its support. The National FPA Team enters these resources and their respective dispatch locations.
Other Type 1 Crews	Y	Y	Y	Y	These crews are modeled and paid for as an FPU resource.